REMARKS

Upon entry of the present amendment, claims 1-7, 9-13 and 15 will remain pending in the above-identified application and stand ready for further action on the merits.

The amendments made herein to claims 1 and 10 do not incorporate new matter into the application as originally filed, since support for the same occurs in original claims 8 and 14, now cancelled. Accordingly, entry of the instant amendment and proper consideration of pending claims 1-7, 9-13 and 15 at present is respectfully requested.

Information Disclosure Statement

Enclosed with the instant amendment are English Abstracts for German patents, DE 19,735,788 and DE 29,905,721 as requested by the Examiner. Also enclosed is a PTO-1449 form listing the same (copy of same previously filed on May 20, 2002), which the Examiner is respectfully requested to initial and return to the undersigned.

Claim Rejections - 35 USC § 102

Claims 1-6 and 10-12 have been rejected under the provisions of 35 USC § 102(b) as being anticipated by the Tadsen et al. (US 5,527,489). Claims 1-6, 8, 10-12 and 14 have been rejected under the provisions of 35 USC § 102(e) as being anticipated by

Yamaguchi et al. (US 6,159,919). Claims 1-15 have been rejected under the provisions of 35 USC § 102(a) as being anticipated by Nitta et al. (EP 936,269). Reconsideration of each of these rejections is respectfully requested based on the following considerations and the amendments made herein to the pending claims 1-7, 9-13 and 15 under examination at present.

The Present Invention and Its Advantages

As recited in pending claim 1, the present invention provides:

> A process for preparing a high-bulk density detergent composition having a bulk density of 650 g/L or more, comprising the steps of:
>
> (A) blending a liquid acid precursor of an anionic surfactant with a water-soluble, alkali inorganic substance in an amount equal to or exceeding an amount necessary for neutralizing the liquid acid precursor, in a substantial absence of an alkali metal aluminosilicate, thereby neutralizing the liquid acid precursor; and
>
> (B) adding *an inorganic powder and a liquid binder* to a neutralization mixture in step (A) after a point of initiation of formation of coarse grains of the neutralization mixture obtained during a course of a neutralization process in step (a) and mixing a resulting mixture. *(emphasis added)*

According to claim 1, the instant invention is characterized by the addition of *"an inorganic powder and a liquid binder"* in step (B), wherein the inorganic powder and the liquid binder are added to the neutralization mixture in step (A) *"after a point of*

initiation of formation of coarse grains" of the neutralization process in step (a). This means that the inorganic powder and the liquid binder are added before or during agglomerating in order to depress the growth of extreme particles. It does *not* mean adding the inorganic powder and the liquid binder after agglomeration.

Further, it is noted that by initiation of the addition of the inorganic powder at this point there can be exhibited the effect of accelerating the disintegration effect of the neutralization mixture *(see specification page 14)*. Still further, by addition of the liquid binder at this stage, the adhesiveness of the liquid binder to granular surfaces can be advantageously reduced, whereby granulation can be suppressed *(see specification page 19)*.

According to the process of the present invention, a high-bulk density detergent composition comprising a granular mixture having a high-bulk density of 650 g/L can be obtained, wherein the detergent composition has both excellent detergent properties and a small particle size *(see specification page 20)*.

Distinctions Over the Cited Art

Each of the rejections over cited art references being applied against the pending claims under the provisions of 35 USC § 102 are discussed below.

Tadsen et al. (US 5,527,489)

Each of pending claims 1 and 10 have been amended to recite limitations previously recited in claim 8. Thus, because the Examiner did not previously reject claim 8 over the cited Tadsen et al. US '489 patent, it follows that the outstanding rejection of Claims 1-6 and 10-12 under the provisions of 35 USC § 102(b) as being anticipated by the Tadsen et al. must be withdrawn.

Additionally, it is noted that Tadsen et al. US '489 utilizes a V-type blender as the device to manufacture detergent particles. Notably, blending with a V-type blender is a mild blending method that is too mild to crush the detergent particles. As a result, the inorganic powder in Tadsen et al. is simply added as a surface modifier of the detergent particles, and it is not added to avoid an agglomeration with the binder. As such, it is clear that the teachings of Tadsen, et al. are incapable of supporting any anticipation or obviousness rejection of any of the pending claims (*e.g.*, see step (B) of instant claim 1, and step (b) of instant claim 10).

Yamaguchi et al. (US 6,159,919)

It is submitted that the cited Yamaguchi et al. US '919 reference does not teach or otherwise provide for each of the limitations recited in instant amended independent claims 1 and 10. More specifically, it is submitted that nowhere in the cited Yamaguchi et al. US '919 reference is there any disclosure of:

> *...adding an inorganic powder and a liquid binder* to a neutralization mixture in step (A) *after a point of initiation of formation of coarse grains of the neutralization mixture* obtained during a course of a neutralization process in step (a) and mixing a resulting mixture. *(emphasis added, see claim 1)*
>
> Or
>
> *...adding an alkali metal aluminosilicate and a liquid binder* to a neutralization mixture obtained in step (a) and mixing a resulting mixture. *(emphasis added, see claim 10)*

Further, Yamaguchi et al. US '919 does not teach a neutralizing process that uses a liquid acid and an alkali inorganic substance (*see* step (A) of instant claim 1, and step (a) of instant claim 10). Instead, Yamaguchi et al. US '919 teaches a dry mixing process at column 13, lines 31-41 thereof. The dry mixing process is merely a means to blend one or more kinds of particles and does not mean to neutralize. This is in complete contrast to the instant invention that requires:

> "blending a liquid acid precursor of an anionic surfactant with a water-soluble, alkali inorganic

> substance in an amount equal to or exceeding an amount necessary for neutralizing the liquid acid precursor, in a substantial absence of an alkali metal aluminosilicate, thereby neutralizing the liquid acid precursor" (*See claims 1 and 10*).

Accordingly, because the cited Yamaguchi et al. US '919 reference does *not* teach each of the limitations recited in each of independent claims 1 and 10, it follows that the outstanding anticipation rejection under 35 USC § 102(e) based thereon is inappropriate and must be withdrawn.

For completeness, it is also noted that because the Yamaguchi et al. US '919 reference and the present invention are assigned to the same assignee and are owned by the same party (Kao Corporation), an obviousness rejection over Yamaguchi et al. US '919 under the provisions of 35 USC § 102(e)/103(a) would not be proper, and would not be allowed under the provisions of 35 USC § 103(c), based on the current applications filing date of February 20, 2002.

Nitta et al. (EP 936,269)

It is submitted that the cited Nitta et al. EP '269 reference does not teach or otherwise provide for each of the limitations recited in instant amended independent claims 1 and 10. More specifically, it is submitted that nowhere in the cited Nitta et al. EP '269 reference is there any disclosure of:

> ...*adding an inorganic powder and a liquid binder* to a neutralization mixture in step (A) *after a point of*

> *initiation of formation of coarse grains of the neutralization mixture* obtained during a course of a neutralization process in step (a) and mixing a resulting mixture. *(emphasis added, see claim 1)*
>
> Or
>
> *...adding an alkali metal aluminosilicate and a liquid binder* to a neutralization mixture obtained in step (a) and mixing a resulting mixture. *(emphasis added, see claim 10)*

Thus, even if Nitta et al. EP '269, discloses a neutralization process, which is characterized by adding sulfuric acid at the same time when liquid acid as surfactant precursor is added to an alkali inorganic substance, nonetheless, Nitta et al. EP '269 provides no teaching or discussion of adding an inorganic powder and binder in the manner recited in the pending claims *(see step (B) of instant claim 1, and step (b) of instant claim 10)*.

Accordingly, because the cited Nitta et al. EP '269 reference does *not* teach each of the limitations recited in each of independent claims 1 and 10, it follows that the outstanding anticipation rejection under 35 USC § 102(a) based thereon is inappropriate and must be withdrawn.

Further, it is submitted that the cited Nitta et al. EP '269 reference provides no motivation to those of ordinary skill in the art that would allow them to arrive at the instant invention as claimed. Absent such motivation in the cited art of Nitta et

al. EP '269 follows that the same reference is incapable of supporting an obviousness rejection of any of pending claims 1-7, 9-13 and 15.

CONCLUSION

Based upon the amendments and remarks presented herein, the Examiner is respectfully requested to issue a Notice of Allowance clearly indicating that all pending claims 1-7, 9-13 and 15 are allowable under the provisions of Title 35 of the United States Code.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John W. Bailey (Reg. No. 32,881) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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By _____
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JWB:enm
1422-0519P

Enclosures: English Abstracts for DE 19,735,788
and DE 29,905,721;
Copy of PTO-1449 form filed on May 20, 2002

Form PTO-1449

INFORMATION DISCLOSURE CITATION IN AN APPLICATION

(Use several sheets if necessary)

ATTY DOCKET NO.	APPLICATION NO.
1422-0519P	10/049,995
APPLICANT: SAITO et al.	
FILING DATE: February 20, 2002	GROUP: UNASSIGNED

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	5,935,923	1999-08-10	Gupta			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES	TRANSLATION NO
	EP 0 936 269 A1	1999-08-18	EPO				
	WO 97/32003	1997-09-04	PCT				
	DE 197 35 788 A1	1999-02-25	GERMANY			Abs	
	WO 98/11198	1998-03-19	PCT				
	EP 0 352 135 A1	1990-01-24	EPO				
	DE 299 05 721 U1	1999-07-22	GERMANY			Abs	

OTHER DOCUMENTS

(Include Name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

PTO-1449

JWB/end

1999-339364/200052 HENKEL KGAA EP- 1043387-A2

Non-sticky, dust-free alkylbenzenesulfonate granulate containing toluenesulfonate

非粘着性、粘着乾燥アルキルベンゼン・スルフォン酸塩粒子状含有トルエンスルホナート

会社コード: HENK ,COGN-
公報発行日: 2000.10.11
代表図面: 0/0
ページ:
出願人: HENKEL KGAA,COGNIS DEUT GMBH
発明者: BLOCHWITZ O,KISCHKEL D,SCHMID K,SYLDATH A,TESMANN H
IPC: C07C 303/42 ,C07C 309/30 ,C11D 001/22 ,C11D 003/34 ,C11D 011/02 ,C11D 017/00 ,C11D 017/06
ダウエントクラス: D25;E14
優先権: 1999.03.27 1999 DE-2005721

使用法: The granulates are used in solid laundry, dish-washing and other detergents (all claimed).

図面なし

効果: Alkylbenzenesulfonate granulates should be as free from zeolites as possible to give the detergent manufacture greater freedom in formulation. Available powders containing toluenesulfonates have a bulk density at most 500 g/l and contain fines. The present granulates, which have a higher bulk density and high content of active substance, do not tend to agglomerate and are free from zeolites and dust.

Abstract

抄録: NOVELTY - Non-sticky, dust-free alkylbenzenesulfonate granulates containing toluenesulfonates contain at least 60 wt.% active substance and have a bulk density of over 550 g/l.

種別	ダウエント週	対応特許番号	公報発行日	筆頭IPC	ページ数	言語
=	2000/52	EP- 1043387-A2	2000.10.11	C11D003/34	0	German
Local Application = A,A, ,20000318,2000EP-0105813						
Designated States(25,R)=AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI						
*	1999/29	DE- 29905721-U1	1999.06.10	C07C309/30	17	
Local Application = A,U, ,19990327, 99DE-2005721						

1999-154828/199914 HENKEL KGAA DE-19735788-A1

Batch production of laundry detergent or component containing few over-sized granules - involves adding liquid anionic surfactant acid to solid neutralising agent, separating fines, recycling coarse fraction to mixer and crusher and combining both granulates

過度に糊付けをされた顆粒剤をほとんど含有しないクリーニング店洗浄剤あるいは成分のバッチ生産

会社コード: HENK
代表図面: 0/0
出願人: HENKEL KGAA
発明者: LIETZMANN A
IPC: C11D 001/83 ,C11D 017/00
ダウエントクラス: D25
優先権: 1997.08.18 1997 DE-1035788

公報発行日: 1999.02.25
ページ: 7

使用法: The process is useful for producing concentrated, free-running granulates containing anionic surfactant, especially alkyl benzenesulphonate granulates, with bulk densities greater than 500 gl. These are useful in (laundry) detergents.

図面なし

効果: Existing processes give a more or less wide particle size distribution, in some cases with considerable amounts of over-sized granules. The present method is simple and relatively cost-effective and gives concentrated granules with a much lower fraction of over-sized granules.

Abstract

抄録: NOVELTY - In discontinuous production of a granular laundry detergent or its components by adding a liquid anionic surfactant acid to an agitated bed of solid, water-soluble inorganic neutralizing agent and optionally other solids in a mixer, (i) the mixture is converted to granulate with over 40 wt.% larger than 2 mm in diameter; (ii) the finer particles are sifted out; and particles larger than 2 mm are recycled to the mixer and crusher to form finer agglomerates; and (iv) the granulates from steps (ii) and (iii) are combined.

種別	ダウエント週	対応特許番号	公報発行日	筆頭IPC	ページ数	言語
*	1999/14	DE-19735788-A1	1999.02.25	C11D001/83	7	
Local Application = A,A, ,19970818,97DE-1035788						